

## **8. COPD hospitalizations in Appalachia**

Hospitalizations with primary diagnoses related to chronic obstructive pulmonary disease (COPD) include those resulting from bronchitis, emphysema, and chronic airway obstruction and does not include asthma.

County-level rates of hospitalizations from COPD have been generated for all persons combined and men and women separately, for two age categories: 35 to 64 and 65 and older. County-level rates of hospitalizations from COPD are shown on pages 156-158. COPD related hospitalizations are responsible for approximately 3.8 percent of all hospitalizations in the year 2000 for the counties used in this analysis (Section II A, Figure 3). Notably, hospitalizations related to COPD are the second leading cause of hospitalization in the region, behind heart disease.

Maps showing the geographic distribution of COPD hospitalization rates are shown on pages 156-158. There is considerable variability in rates of hospitalizations among counties in the Appalachian region, with major clustering occurring in central Appalachian including counties in Eastern Kentucky, Southern West Virginia, and Western Virginia. These clusters appear fairly consistently among all population subgroups and most counties designated as high outliers also appear in these regions.

There are significant disparities in rates of hospitalization from COPD, both within each population subgroup and between age groups. A general north-south gradient appears in the region with more northern counties experiencing generally lower rates of hospitalization. COPD hospitalizations appear to be more prevalent among elderly men than elderly women but more prevalent among women ages 35 to 64 than men ages 35 to 64.

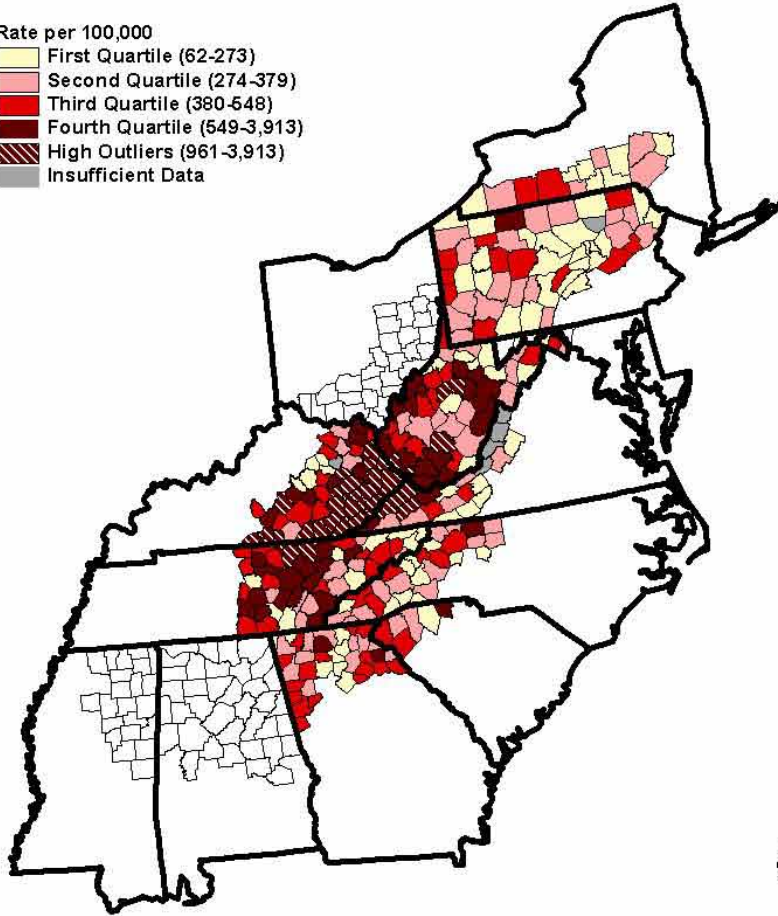
Hospitalization rates from COPD related illnesses range from 62 per 100,000 to 3,913 per 100,000 for all persons ages 35 to 64 and from 175 per 100,000 to 10,764 per 100,000 for all persons ages 65 and older. Among men ages 35 to 64 rates range from 56 per 100,000 to 2,210 per 100,000. Among elderly men rates ranged from 550 per 100,000 to 14,528 per 100,000. Among women ages 35 to 64 rates range from 122 per 100,000 to 6,060 per 100,000. Among elderly women hospitalization rates ranged from 318 per 100,000 to 9,825 per 100,000.

## COPD Hospitalization Rates, 2000

### All Persons Ages 35 to 64

Rate per 100,000

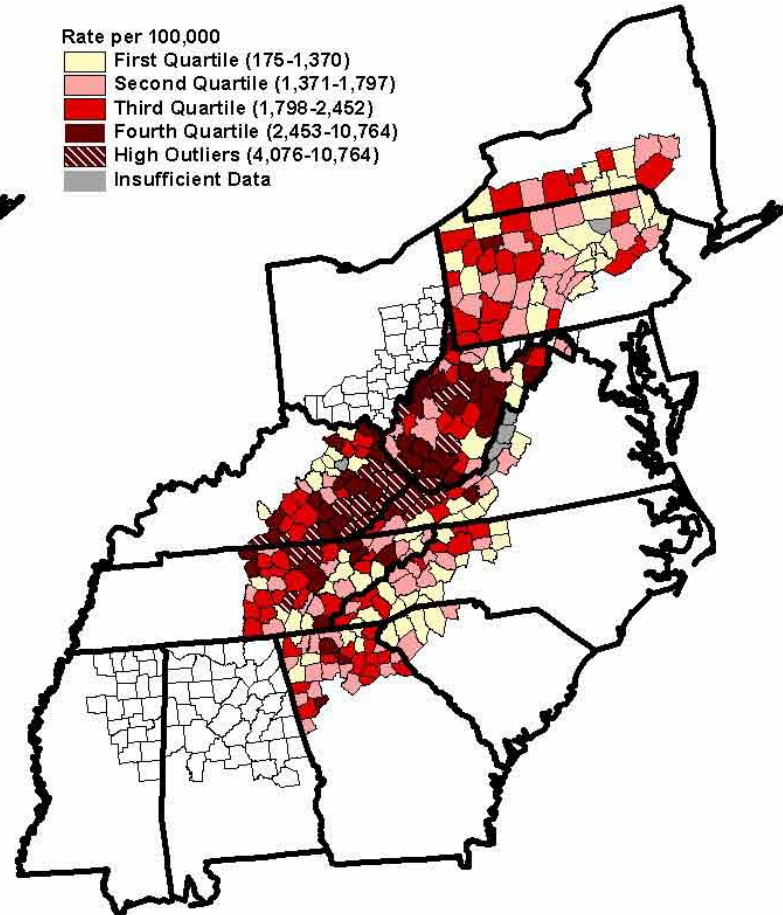
- First Quartile (62-273)
- Second Quartile (274-379)
- Third Quartile (380-548)
- Fourth Quartile (549-3,913)
- High Outliers (961-3,913)
- Insufficient Data



### All Persons Ages 65 and Older

Rate per 100,000

- First Quartile (175-1,370)
- Second Quartile (1,371-1,797)
- Third Quartile (1,798-2,452)
- Fourth Quartile (2,453-10,764)
- High Outliers (4,076-10,764)
- Insufficient Data

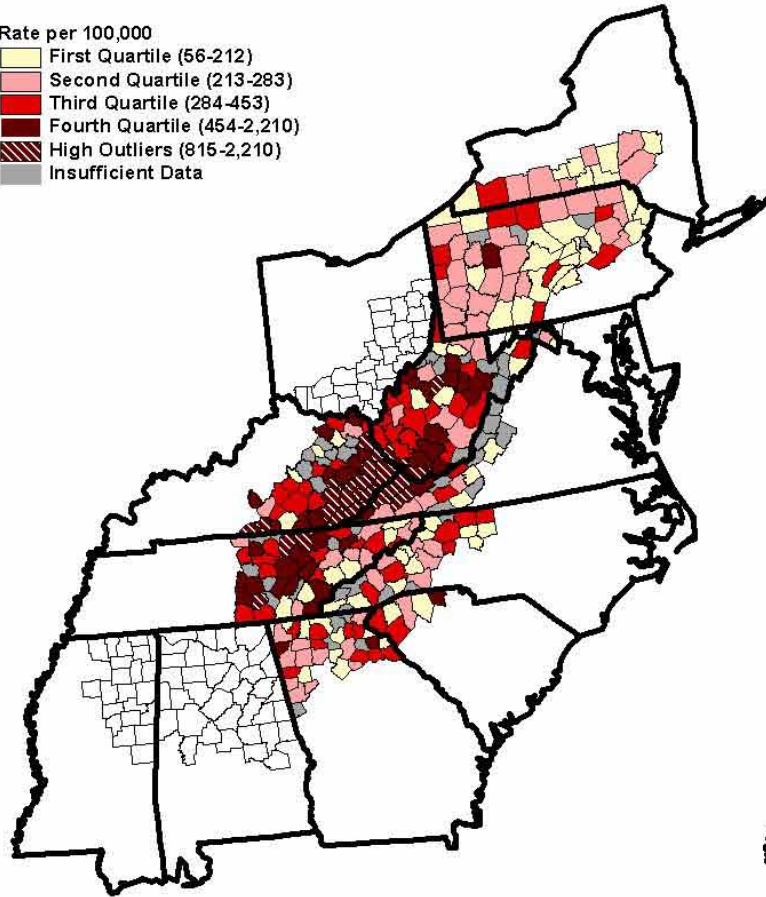


## COPD Hospitalization Rates, 2000

### All Men Ages 35 to 64

Rate per 100,000

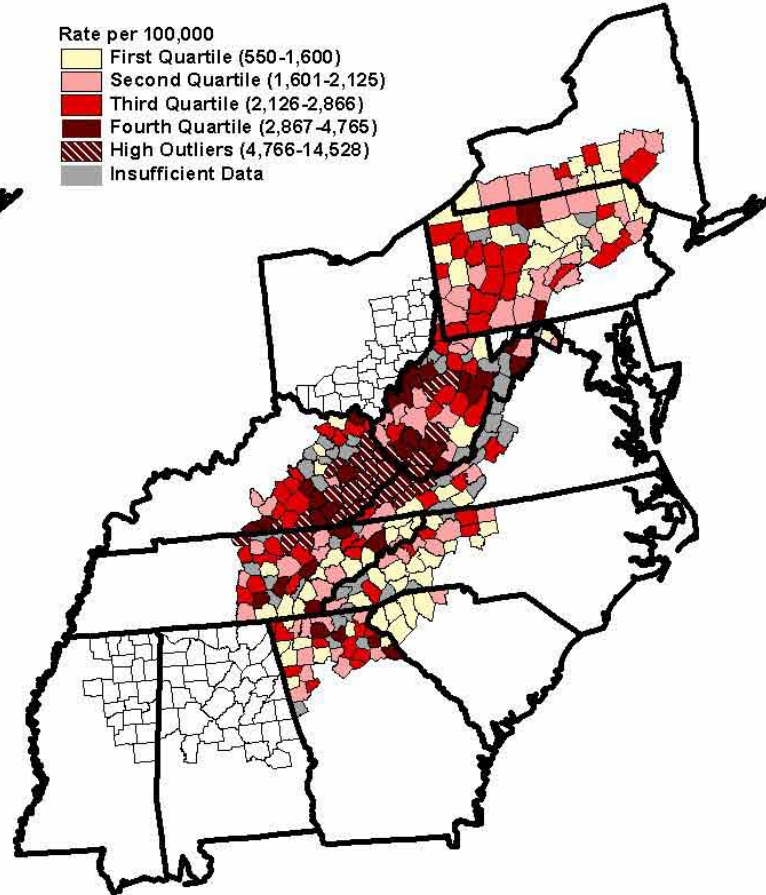
- First Quartile (56-212)
- Second Quartile (213-283)
- Third Quartile (284-453)
- Fourth Quartile (454-2,210)
- High Outliers (815-2,210)
- Insufficient Data



### All Men Ages 65 and Older

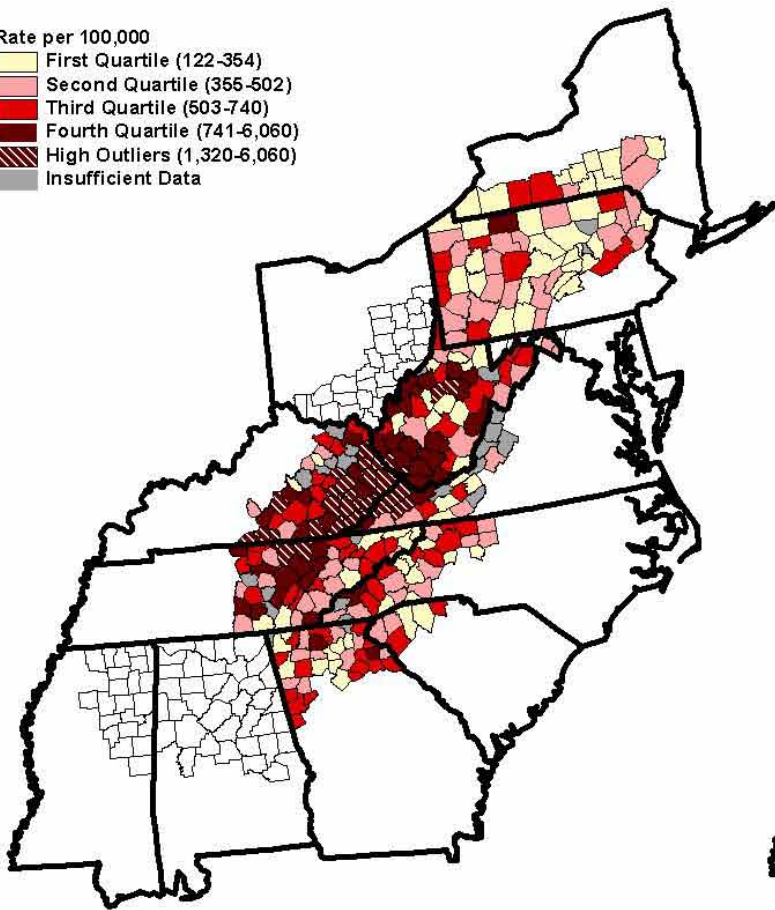
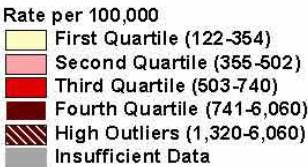
Rate per 100,000

- First Quartile (550-1,600)
- Second Quartile (1,601-2,125)
- Third Quartile (2,126-2,866)
- Fourth Quartile (2,867-4,765)
- High Outliers (4,766-14,528)
- Insufficient Data



COPD Hospitalization Rates, 2000

All Women Ages 35 to 64



All Women Ages 65 and Older

